In other words, if $a \models p$ and $b \underset{A}{\equiv} c$ $(b, c \in B)$

then $b \underset{Aa}{\equiv} c$.

Defn Let $\kappa > |T|$. A set $\mathcal{M} \subseteq \mathcal{U}$ is κ-saturated if

$\forall A \subseteq M$ $|A| < \kappa$, $\forall p \in S(A)$, p is realised in $\mathcal{M}$

Fact $\forall A$ $\exists \mathcal{M} \supseteq A$ s.t. $\mathcal{M}$ is $|T|^{+}$-saturated.

Lemma Let $\mathcal{M}$ be $|T|^{+}$saturated, $p \in S(\mathcal{M})$ definable.

Then (i) p has a unique definition (up to equivalence)

(ii) the unique definition is good.

$\Rightarrow$ $\forall B$, let $p|_B$ be the type resulting from the application of the definition to B.

(iii). $\forall B \supseteq \mathcal{M}$, $p|_B$ is a nonsplitting extension of p.

Proof (i) Assume $\{d_\varphi p\}$ and $\{d'_\varphi p\}$ are both definitions & not equivalent.

So $\exists \varphi$ s.t. $d_\varphi p \not\equiv d'_\varphi p$.

ie $\exists b$ (not in $\mathcal{M}$) s.t. say $\models d_\varphi p(b)$ & $\not\models d'_\varphi p(b)$